

Motivation

Rowhammer is a powerful attack that allows to compromise entire systems without a software vulnerability.

All published attacks require (unprivileged) code execution on the victim machine. We want to investigate new attack vectors that do not require code execution on the victim machine. Such attacks could be run more easily over the network and thus make Rowhammer attacks much more practical.

The aim of this project is to investigate the feasibility of Rowhammer attacks without code execution.

Goals and Tasks

- ▶ Get familiar with Rowhammer attacks
- ▶ Get familiar with our hardware setup
- ▶ Implement a Rowhammer attack over the network

Literature

- ▶ [D. Gruss, C. Maurice, and S. Mangard](#)
Rowhammer.js: A Remote Software-Induced Fault Attack in JavaScript
[DIMVA'16](#)

Deliverables

- ▶ Project files (zip, cleaned)
- ▶ Documentation (pdf)
- ▶ Presentation (pdf)

Schedule

- ▶ Start Immediately
- ▶ Month 1 Reading literature
- ▶ Month 2 Implementing
- ▶ Month 3 Final deliverables

Studies

INF TEL SW

Prerequisites

- ▶ C programming

Advisor / Contact

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